

Apka

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **52**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **67 C**, Time **50 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.8 kg (46.2%)	80 %	4
Grain	Strzegom Pale Ale	2 kg (51.3%)	79 %	6
Grain	Strzegom Monachijski typ II	0.1 kg (2.6%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	25 g	60 min	13.1 %
Boil	Willamette	50 g	15 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Liquid	150 ml	White Labs